# SCHULTE ROTH & ZABEL LLP

319 Third Avenue New York, NY 10022 (212) 756-2000 fax (212) 593-5955

www.srz.com

# FACSIMILE PLEASE DISTRIBUTE TO ALL LISTED PERSONS

To Company

Examiner D. Eng

Group 2155

Fax No. 703-746-7238 Confirmation No.

703-305-3900

FROM: David E. Boundy

DIRECT DIAL: (212) 756-2522

FILE NO.: 5231.16

DATE:

February 4, 2002

Number of Pages:

26

Applicant(s): John S. Yates Jr., et al.

Serial No.:

09/429,094

October 28, 1999

Art Unit: 2155

Examiner: D. Eng

Filed: Title:

SIDE TABLES ANNOTATING AN INSTRUCTION STREAM

# AFTER FINAL – EXPEDITED PROCEDURE

I hereby certify that the attached

- This FAX cover sheet
- Request for Withdrawal of Finality of Office Action
- Response to Office Action of December 4, 2001
- Information Disclosure Statement and Form PTO-1449
- Change of Correspondence Address
- Statement Under 37 C.F.R. § 3.73(b) and Power Of Attorney
- Courtesy Copy of Request for Intervention of the Supervisory Examiner

along with any paper(s) referred to as being attached or enclosed) are being transmitted by facsimile on February 4, 2002 to the Commissioner for Patents, Box AF, Washington, D.C. 20231.

Dated: February 4, 2002

Registration No. 36,461

THE INFORMATION CONTAINED IN THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE, AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL

For incomplete transmission please call (212) 756-2000 ext.6076

9145969.1

### SCHULTE ROTH & ZABEL LLP

Official

919 Third Avenue New York, NY 10022 (212) 756-2000 fax (212) 593-5955

unuvo.srz.com

# FACSIMILE PLEASE DISTRIBUTE TO ALL, LISTED PERSONS

To Company Fax No. Confirmation No.

Supervisory Examiner Ayaz R. Sheikh

Group 2155

703-305-3718

703-305-9648

FROM: David F. Boundy

**DIRECT DIAL:** (212) 756-2522

FILE NO.: 5231.16

DATE: February 4, 2002

Number of Pages: 24

Applicant(s): John S. Yates Jr., et al.

Serial No.: Filed:

09/429,094

October 28, 1999

Art Unit: 2155

Examiner: D. Eng

Title:

SIDE TABLES ANNOTATING AN INSTRUCTION STREAM

# AFTER FINAL - EXPEDITED PROCEDURE

Dear Mr. Sheikh:

As we discussed, here is a Request for Intervention of the Supervisory Examiner, which sets out only some examples of the problems I have had with Examiner Eng's examination of this application. Also attached are courtesy copies of a Request for Withdrawal of Finality and a Response to Office Action being filed today. I look forward to discussing these items and the application with you, to clear up the problems and get the application back on a path of forward progress. Thanks very much.

I hereby certify that the attached

- This FAX cover sheet
- Request for Intervention of the Supervisory Examiner
- Courtesy Copy of Request for Withdrawal of Finality of Office Action
- Courtesy Copy of Response to Office Action of December 4, 2001

along with any paper(s) referred to as being attached or enclosed) are being transmitted by facsimile on February 4, 2002 to the Commissioner for Patents, Box AF, Washington, D.C. 20231.

Dated: February 4, 2002

David E. Boundy

Registration No. 36,461

THE INFORMATION CONTAINED IN THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE. AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.

For incomplete transmission please call (212) 756-2000 ext.6076

9145969.1

**PATENT** 

DOCKET NO. 5231.16 #1

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): John S. Yates Jr., et al.

Serial No.:

09/429.094 - 5512

Filed: Title:

October 28, 1999

Art Unit: 2155

Examiner: D. Eng

SIDE TABLES ANNOTATING AN INSTRUCTION STREAM

COMMISSIONER FOR PATENTS

Box AF

Washington D.C. 20231

PECEIVED TOOR COME, 2100

## REQUEST FOR INTERVENTION OF THE SUPERVISORY EXAMINER

Applicant requests the intervention of the supervisory examiner. Because a third Office Action has been issued in this case, MPEP § 707.02 states that "the supervisory examiner[] [is] expected to personally check on the pendency of [this] application ... with a view to finally concluding its prosecution."

Examiner Eng's papers strongly suggest that either Examiner Eng is confused as to his examination duties under the MPEP, or else that he is deliberately refusing to examine the application. He has raised and maintained rejections on grounds that are squarely forbidden by the MPEP, has raised and maintained incomplete rejections over the prior art, has examined the application piecemeal, and has prematurely imposed a final rejection. Examiner Eng's sidetracking onto irrelevant and improper issues, and lack of attention to the words of the claims and the directions of the MPEP, have prevented any forward progress of the prosecution of this application.

Concurrently herewith, Applicant is FAX'ing, to Examiner Eng's attention, a Response to the Office Action of December 4, 2001, and a Request for Withdrawal of Finality of the Action. Courtesy copies of these two papers, and of Examiner Eng's Action of December 4, are attached hereto as exhibits.

The Supervisory Examiner's attention is drawn to the following:

This third Office Action omits discussion of entire paragraphs of independent claim 14 (among other claims), even though this paragraph has been expressly argued in each of

> I certify that this correspondence, along with any documents referred to therein, is being transmitted by facsimile on February 4, 2002 to The Commissioner for Patents, Box AF,

Washington D.C. 20231.

5231.16

09/429.094 Check Request

Request for Intervention of the Supervisory Examiner 9145969.1

1



Applicant's two prior Responses to Office Action. (See section IV of the enclosed Response to Office Action, and section III.A of the Request for Withdrawal of Finality.) Once, possibly twice, is forgivable; three times raises a genuine question of Examiner Eng's bona fide intention to examine the application. At a minimum, this omission bars the finality of the current Office Action.

- This third Office Action entirely omits discussion of independent claim 25 and a number of the dependent claims. (See section V of the enclosed Response to Office Action, and section III.B of the Request for Withdrawal of Finality.) These omissions bar the finality of the current Office Action.
- This third Office Action is the first to contain even a shadow of a discussion of any dependent claim (e.g., compare Action of December 4, 2001, page 4, lines 7-16 to Action of April 2001, at page 6). All purported rejections of the dependent claims are "new grounds of rejection," and many of the dependent claims are unamended, or amended only in ways unrelated to the new discussion. This bars final rejection.
- Examiner Eng has repeatedly mixed the "clear and distinct" requirement of § 112 ¶ 2 with the "how to make and how to use" requirement of § 112 ¶ 1. (See the first two pages of the two prior Office Actions, and page 2, lines 10-11 of the December 2001 Action.) This "mix and match" approach to examination is forbidden by MPEP § 2171. The previous Action raised a "single means claim" rejection of a method claim, in defiance of MPEP § 2164.08(a). These forbidden examination tactics and groundless rejections confuse the issues, and divert attention from any consideration of the merits.
- This third Office Action purports to reject elements that appear nowhere in the claims, only in the Remarks of a previous Response to Office Action. See Action of December 4, 2001, page 4, lines 8-9 ("Applicant's invention is an emulator" - the word "emulator" appears in no claim). The Supervisory Examiner is requested to remind Examiner Eng that only claims may be examined and rejected, not an applicant's remarks.
- This third Office Action purports to reject "all independent claims" under § 112 ¶ 2 because of a question relating to "how likelihood of the existence of an alternate coding of instructions trigger an interrupt." Of the ten independent claims now pending, only one recites both "likelihood of the existence of an alternate coding of instructions" and "[triggering] an interrupt." (See section II of the Response to Office Action.) Rejecting nine claims that do not even recite the complained-of language is typical of the pure sloppiness and groundless rejection that has pervaded Examiner Eng's work.
- This third Office Action refuses consideration of a reference validly submitted in two prior Information Disclosure Statements, in defiance of MPEP § 2133.03(b)(IV)(B). (See Section I of the Response to Office Action.) Failure to consider this reference bars the finality of the present Office Action.
- Page 4, line 9-10 of the December Action states, "All independent claims (see claims 30 and 19 for example) merely broadly recite an interrupt circuit." Consider the facts: the recitation of "interrupt circuitry" of claim 1 is one-hundred twenty-four words long. The recitation of "interrupt circuitry" in claim 19 is sixty-five words long. The "interrupt" of claim 30 is limited in a phrase of thirty-five words. It is difficult to see how whole



paragraphs can be reduced to two words by an examiner who is performing his duties in good faith.

- The Examiner has failed to clearly compare the claims to the prior art. See, for example, the discussion of claim 19 spanning pages 3-4 of the Office Action: there is no direct comparison between any word of the claim and any specific point in any reference. For another example, there is no comparison of the word "jump" (3rd line from the bottom of page 3) and any claim limitation Applicant is not sure what claim limitation is thought to correspond to the word "jump" of the reference. Applicant requests the Supervisory Examiner require Examiner Eng to set out his rejection in the form of a word-by-word comparison of the claim to the prior art, in the form recommended by the Board of Patent Appeals. See, e.g., Ex parte Braeken, 54 USPQ2d 1110, 1112-13 (Bd. Pat. App. Interf. 1999).
- Though numbering of paragraphs of Office Actions is not strictly required, MPEP § 707.07(k), it is certainly helpful in focusing the dialog between an applicant and examiner. Similarly, MPEP § 707.08 suggests that the primary examiner "should" indicate a telephone and FAX number at the end of each Office Action.

Applicant's single greatest immediate concern is the very serious charge that Examiner Eng raises at page 3, line 18 of the December Action, that Applicant argued "misleadingly" in the Remarks of the previous Response to Office Action. As discussed in section VII of the enclosed Response to Office Action, Examiner Eng's complaint is occasioned solely by Examiner Eng's own omission of entire paragraphs of the claims, and failure to compare those paragraphs to any portion of the prior art. Because of the serious effect that Examiner Eng's comment may have on the enforceability of any patent that issues, Applicant requests that the Supervisory Examiner ensure that Examiner Eng's next paper fully clarifies the record, unequivocally renouncing any charge of improper conduct on the part of Applicant.

Applicant would welcome the reassignment of this application to another examiner who is willing to engage in a good faith examination of this application.

In the alternative, if the application is to remain under Examiner Eng, Examiner Eng's numerous and irresponsible departures from proper procedure suggest that personal review by the Supervisory Examiner of all future prosecution of this application would be appropriate. Examiner Eng should be reminded that a proper prior art rejection considers every word of the claim. He should be reminded that he must use only reasoning sanctioned by the MPEP. If a rejection cannot be framed within these two constraints, then he should be instructed that allowance is the only permissible course.

It is believed that this paper occasions no fee. Kindly charge any additional fee, or credit any surplus, to Deposit Account 50-0675, Order No. 5231.16.

Respectfully submitted,

SCHULTE ROTH & ZABEL

Registration No. 36,461

Dated: February 4, 2002

Mailing Address: SCHULTE ROTH & ZABEL 919 Third Avenue New York, New York 10022 (212) 756-2000

(212) 593-5955 Telecopier

**PATENT** 

**DOCKET NO. 5231.16** 

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): John S. Yates Jr., et al.

Serial No.:

09/429.094

Art Unit: 2155

Filed:

October 28, 1999

Examiner: D. Eng

Title: SIDE TABLES ANNOTATING AN INSTRUCTION STREAM

#### COMMISSIONER FOR PATENTS

Box AF

Washington D.C. 20231

## REQUEST FOR WITHDRAWAL OF FINALITY OF OFFICE ACTION

Applicant observes that the Action of December 4, 2001 was improperly made final:

- (a) the Action purports to raise several new grounds of rejection of unamended claims,
- (b) several new grounds not necessitated by amendment, and (c) several purported rejections are incomplete. Applicant requests that finality of the Action of December 4, 2001 be withdrawn, and that the Response to Office Action filed herewith be entered as of right.
- I. The Action of December 2001 raises a new ground of rejection under 35 U.S.C. § 112

In pertinent part, MPEP § 706.07(a) reads as follows:

#### Final Rejection, When Proper on Second Action 706.07(a)

[A] second or any subsequent actions on the merits shall [not] be final ... where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement...

The Action of December 4, 2001, reads as follows:

Claims 1-52 and 54-57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to all independent claims, it is not seen how likelihood of the existence of an alternate coding of instructions triggers an interrupt.

> I certify that this correspondence, along with any documents referred to therein, is being transmitted by facsimile on February 4, 2002 to The Commissioner for Patents, Box AF, Washington D.C. 20231.

Request for Withdrawal of Finality of Office Action 9145969.1

There is no discussion of this issue in the Action of April 10, 2001. Thus, this is a "new ground of rejection."2

Independent claim 10 is an unamended claim. Any amendments to claims 2, 14, 24, 25 and 30 (at least) in Applicant's papers of August 2001 have nothing to do with "how likelihood of the existence of an alternate coding of instructions triggers an interrupt."

The purported rejection of "all independent claims" raises new grounds of rejection of an unamended claim, and of claims where the purported rejection was not "necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement." The Action of December 4, 2001 may not be made final.

#### Ц. The Action of December 2001 raises new grounds of rejection under 35 U.S.C. § 103

The purported rejection of claim 10 is a "new ground of rejection" that bars finality

A number of claims in this application recite limitations that have never been discussed in the prior art discussion of any previous Office Action. For example, claim 10 recites as follows:

> 10. A microprocessor chip, comprising: instruction pipeline circuitry;

table lookup circuitry designed to index into a table by a memory address of a memory reference arising during execution of an instruction, and to retrieve a table entry corresponding to the address, the table entry being distinct from the memory referenced by the memory reference;

the instruction pipeline circuitry being responsive to the contents of the table to alter a manipulation of data or transfer of control behavior of the instruction in a manner incompatible with the architectural definition of the instruction.

<sup>1</sup> In the paragraph spanning pages 2-3, the Action of April 2001 asks a question regarding the interrelationship between a table entry "describing a likelihood of the existence of an alternate coding of the instruction" and "different behaviors." The April Action raised no question concerning the interrelationship of "likelihood of the existence of an alternate coding of instructions" and "[triggering] an interrupt" as posed here. Further, the Action of April 2001 raises its "different behaviors" question only as to claims 1, 7, 14 and 24 (see page 3, lines 2-3). The April 2001 Action nowhere purports to raise even its "different behaviors" question with respect to the other independent claims, as purportedly rejected in the December Action.

<sup>&</sup>lt;sup>2</sup> Applicant does not concede that this rejection is proper – as discussed in the accompanying Response to Office Action, there is no legal basis for this rejection.

Claim 10 recites a table that is indexed "by a memory address of a memory reference arising during execution of an instruction." Neither previous Office Action mentioned this limitation in their discussions under §§ 102 or 103. Therefore, no § 103 rejection of claim 10 had been raised in this application before December 2001.

The Office Action of December 2001 is the first time that any Action has made even partial mention of this claim limitation in any attempted rejection over prior art. Because there was no prior rejection of claim 10 under § 103, this is a new ground of rejection.

Claim 10 was not amended by the papers of August 2001.

Accordingly, this new ground of rejection of claim 10 bars final rejection.

#### B. Rejections of dependent claims in the Action of December 2001 are "new grounds of rejection" that bar finality

The Action of December 4, 2001 contains the first discussion of any dependent claim. These are all "new grounds of rejection." A number of dependent claims are unamended, and others are amended only in ways that do not relate to the new discussion. Final rejection is improper.

#### III. A piecemeal Office Action cannot be a final Office Action

MPEP § 707.07(g) warns that "Piecemeal examination should be avoided, as much as possible." MPEP § 706.07 adds teeth to § 707.07(g), and protects applicants against abuses by piecemeal examiners, forbidding a rejection from being made final when the rejection is incomplete:

Before final rejection is in order, a clear issue should be developed between the examiner and applicant. ...

No "clear issue" can possibly be developed on an issue where the Examiner has been entirely silent.

As discussed below, none of the three Actions in this case have made a bona fide attempt to examine all limitations of all claims. Incomplete Office Actions may not mature into final rejections.



# A. Several independent claims recite elements that are nowhere compared to the prior art

Several of the claims purportedly rejected under § 103 recite limitations that are nowhere compared to the prior art. For example, claim 14 recites as follows:

 A microprocessor chip, comprising: instruction pipeline circuitry;
 address translation circuitry; and

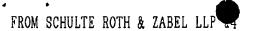
a lookup structure having entries associated with corresponding address ranges generated by the instruction pipeline circuitry and translated by the address translation circuitry, the entries describing a likelihood of the existence of an alternate coding of instructions located in the respective corresponding address range.

Three successive Office Actions have purported to raise § 103 rejections of this claim. Even though the Examiner's papers have made no attempt to indicate the portions of the prior art thought relevant to the underlined claim limitation, Applicant has made a good faith effort to show how this language distinguishes the prior art. For example, the Response filed August 10, 2001, at page 26, lines 5-13 states as follows:

Further, none of the prior art tables behave in this manner. Table 16 in Morley '982 contains the address of a translated instruction sequence (Morley '982, col. 5, lines 59-62), not the "likelihood" of whether "an alternate coding of instructions" exists at all, as recited in claim 14. Applicant's review of Woods '032 reveals no table whose entries "[describe] a likelihood of the existence of an alternate coding of instructions located in the respective corresponding address ranges." Bianchi '029 discloses only a fairly conventional address translation scheme, in which the address translation table holds the addresses of memory pools (e.g., col. 28, lines 48-57), not the "likelihood of the existence of an alternate coding of instructions" as recited in claim 14.

To meet the MPEP's minimum prima facie requirements – for a rejection to exist at all – a § 103 written rejection must compare every claim limitation to the prior art.<sup>3</sup> The Office Action of December 4, 2001 makes no such attempt. Therefore, there is no § 103 rejection of claim 14 that would allow a rejection to be made final.

Further, the two previous Actions have made no attempt to compare this paragraph to the prior art. This claim has never been rejected over the prior art.



Because claim 14 (among other claims) is not rejected at all, it cannot be finally rejected.

# B. An independent claim is purportedly rejected, yet entirely undiscussed

The Action of December 4, 2001 purports to reject claim 25 under § 103. Claim 25 is an independent claim (see Supplementary Response to Office Action, filed August 21, 2001). Claim 25 is an "unamended claim" for purposes of MPEP § 706.07(a), because the only amendment to the claim was rewriting a previously-dependent claim into independent form.

The body of the present Office Action nowhere discusses claim 25. Neither previous Office Action discussed the limitations recited in claim 25. Indeed, Applicant's sole purpose in amending claim 25 into independent form was to force the Examiner to examine the claim. Failure to do so in three successive Office Actions renders final rejection improper.

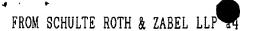
A claim that is not rejected at all cannot be finally rejected.4

#### IV. Conclusion

For these reasons, the finality of the Action of December 4, 2001 should be withdrawn, this amendment should be entered as of right (even without a showing of reasons under Rule 116), and the Remarks in the accompanying Response to Office Action should be given the Examiner's full consideration

<sup>&</sup>lt;sup>5</sup> MPEP § 2143.03 states unambiguously that "Indefinite Limitations Must Be Considered" – the purported rejection under § 112 ¶ 2 in no way excuses disregarding the claim limitation in the § 103 context.

<sup>&</sup>lt;sup>4</sup> Because many claims (including claim 25) are under no § 102 or 103 rejection in the Action of December 4. Applicant notes that any rejection of these claims over the prior art in any future Office Action will be "new grounds of rejection." Piecemeal examination has costs for an examiner, as well as costs for an applicant.



It is believed that this paper occasions no fee. Kindly charge any fee due to Deposit Account 50-0675, Order No. 5231.16.

Respectfully submitted,

SCHULTE ROTH & ZABEL

Registration No. 36,461

Dated: February 4, 2002

Mailing Address: SCHULTE ROTH & ZABEL 919 Third Avenue New York, New York 10022 (212) 756-2522 (212) 593-5955 Telecopier

09/429,094